

## ABSTRACT

Disclosed is a method for manufacturing a semiconductor device which comprises a step for carrying a plurality of substrates (1) in a process chamber (4), a step for supplying an oxygen-containing gas from the upstream side of the substrates (1) carried in the process chamber (4), a step for supplying a hydrogen-containing gas from at least one location corresponding to a position within the region where substrates (1) are placed in the process chamber (4), a step for oxidizing the substrates (1) by reacting the oxygen-containing gas with the hydrogen-containing gas in the process chamber (4), and a step for carrying the thus-processed substrates (1) out of the process chamber (4).